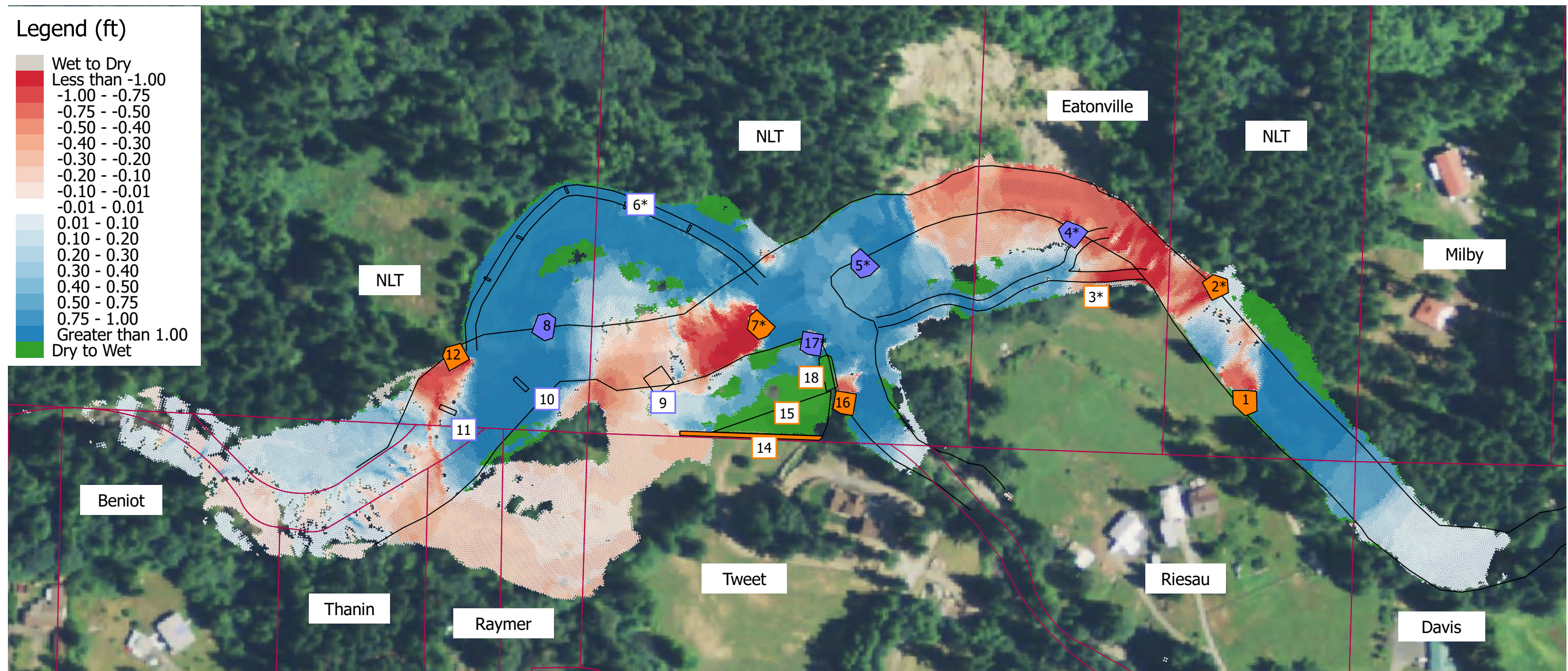


Mashel River Reach 7 Alternative 2

02-23-2016

Water Surface Elevation (WSE) Differences for 100-year Flood Event



Structure Key

- Large Apex ELJ Alt 2
- Large Bank ELJ Alt 2
- Large Apex ELJ Alt 1
- Large Bank ELJ Alt 1

- Design element 3 is side channel #1
- Design element 6 is side channel #2
- Design element 14 is the flood containment berm
- Design element 15 is the zone for floodplain roughening
- Design element 18 is the zone for removal of the existing rock-armored berm

Notes:

1. Results shown are preliminary and are for discussion purposes only.
2. Alternative 2 includes all of Alternative 1 design elements (colored orange). Alternative 2 design elements are colored blue to show what was added to Alternative 1 elements.
3. Areas shaded in red have a lower WSE compared to existing conditions (i.e., shallower) as a result of the project; areas shaded in blue have a higher WSE compared to existing conditions (i.e., deeper). The darker the color the greater the difference, and the lighter the color the less the difference. Areas shaded green were dry under existing condition, but are now wet under proposed conditions for the flow modeled.
4. Design elements 9 (large bank ELJ) and 10 and 11 (small mid-channel ELJs) were included in the original Alternative 2 concept, but were removed when the hydraulic analysis indicated a "rise" for the 100-year WSE on the Tweet and Raymer properties that was caused by these design elements.
5. Design elements 2, 3, 4, 5, 6, 7 and 17 (noted with an asterisk) were included in the 2009 70% design.
6. Small habitat LWD clusters in side channel #2 (shown as small rectangles) and near design element # 9 along the left bank (not shown) are optional and were not included in the hydraulic model.